

A LIST
of the
APPARATUS
of

SIR FRANCIS GALTON (1822-1911)

held in the Galton Laboratory
University College London

compiled by A.G.Thoday with the
support of a grant from the
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GALTON APPARATUS

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TRAVEL

1. Mercury trough artificial horizon c 1850
by Troughton & Simms
2. Traveller's prismatic compass c 1850
by Troughton & Simms
Ref: Narrative of an explorer in tropical
S.Africa by FG 1853 p.296
3. Terrestrial telescope for sextant c 1850
Ref: As in 2, p.277
4. 8" brass sextant, with primitive c 1850
artificial horizon
by Cary
Ref: Hints to travellers, Royal Geographical
Society 1878 p.16
5. Artificial horizon on levelling screws c 1850
by Dollond
6. Traveller's aneroid barometer c 1862
by Elliot Bros
7. Galton's sun signal or hand heliostat c 1860
Ref: Report of the British Association
1858 pp.15-17 and 211-212
The Engineer Oct.15th 1858 p.292
Proceedings of the Royal Geographical
Society Vol 4 1859 pp.14-19
Catalogue of special loan exhibition of
scientific instruments, South Kensing-
ton Museum 1876 p.767
Galton Papers No 117/2
Memories of my life by FG p.165
8. Zeometer - boiling water hypsometer c 1864
by Casella
Ref: Galton Papers No 117/2
9. Boiling point thermometer c 1864
by Casella. Broken. Item for No 8
10. Reflecting circle, inscribed F.Galton to c 1860
Capt R.Burton. Telescope missing
11. Roll-up linen bag for dissecting instru- c 1850
ments. Few items in it remaining

TRAVEL CURIOS

- | | |
|--|---------|
| 12. Rhinoceros horn
one small horn and four shaped pieces | c 1850 |
| 13. Portion of ivory tusk
labelled: 'Frank's Ivory from Africa' E.S.G. | c 1850 |
| 14. Papyrus
10cm portion prepared by FG in Sicily | n.d. |
| 15. Sheathed dagger
length 20cm | c 1850? |
| 16. African dagger in sheath
sheath, copper over wood length 24cm | c 1850 |
| 17. Small leather pouch
probably African, front design in copper
plate and studs | c 1850 |
| 18. Collapsible Chinese lantern | n.d. |
| 19. One Arabic metal coffee pot | n.d. |
| 20. Small native leather bag containing
powder, like snuff | c 1850 |
| 21. Geological rock samples, small portions
obtained between 1857 and 1864 | 1857-64 |
| 22. Two Burmese bricks, one partly broken.
Both show Buddha as centre piece | n.d. |
| 23. Box containing native robes and draperies
seven items, some Arab costumes | n.d. |
| 24. Seven low value German, Austrian and
USA coins dated between 1851 and 1875 | 1851-75 |

METEOROLOGY

- | | |
|--|---------|
| 25. 4" glass sphere, probably from a Campbell
sunshine recorder. Ref: Science Museum,
Meteorology Collection Catalogue 1922, Plate IV | 1857-95 |
| 26. Two samples of printing plates for weather
charts. Sample plates for first published
weather charts in <u>The Times</u> 1st April 1875 | 1875 |

HEREDITY Experiments with SEEDS

27. Set of 100 peapods illustrating exponential 'Ogive' curve 1875
 Ref: Life & Letters of FG by K.Pearson
 Vol.IIIA, p.31
 Phil Mag. Jan 1875, Vol 49, pp.33-46
28. 4 frames of Sweet Pea seeds arranged in spirals 1875-6
 Ref: Life & Letters of FG by K.Pearson
 Vol.II, pp.180,181,187,189
29. Arrangement of seeds [cress] to illustrate Law of Frequency of Error 1875
 Ref: Statistics of intercomparison, Phil Mag. 1875
Life & Letters of FG by K.Pearson
 Vol.II, p.293 with illustration
30. Glazed card with seeds, similar to No.29 c 1875
 Ref: No details but connected with No.29
31. Set of 12 glass tubes in wooden base c 1875
 Probably intended for sorting seeds into sizes

ANTHROPOMETRIC STUDIES

32. Five-dial registrator c 1880
 Ref: Life & Letters of FG by K.Pearson
 Vol.III, p.341
Report of the British Association
 1880, p.625
Nature, Vol.22, 1880, p.478
33. Head calipers c 1882
 by Murray & Heath
 Ref: Anthropometric investigation in the British Isles British Association Report
 1919, pp.14,15,32-4
34. Pair of Flower's craniometers, etc. c 1885
 by Stanley
 Ref: as No.33, p.34
35. Head spanner c 1896
 by Cambridge Scientific Instrument Co.Ltd
36. Pair of gloves with pricker in left thumb c 1880
 Ref: Report of the British Association
 1880, p.625

37. [a] Wooden thumb pricker c 1880
 [b] Metal frame card pricker
 [c] Homemade card pricker
 [d] Triple point card pricker, homemade,
 no details
38. Hand dynamometer c 1885
 for measuring strength of hand grip
 by Mathieu, Paris
 Ref: Recent designs of anthropometric
 instruments, Journal of Anthropological
 Institute, Vol.16, 1886
Anthropometric Investigation in the
 British Isles, B.A. Report 1909, p.42
39. Five Galton whistles c 1876
 2 high frequency, 2 lower frequency, 1 cane,
 1 holder
 Ref: Catalogue of special loan exhibition
 of scientific instruments, South
 Kensington Museum 1876 p.178
Descriptive List of Anthropometric
 Apparatus, 1887, 1889, 1890, pp.8 & 9
 Cambridge Scientific Instr. Co.
Journal of the Anthropological
 Institute Nov.1887
40. 30 samples of hair n.d.
 by Franz Rosset, Freiburg
41. [a] Part of model for drawing face profiles n.d.
 Homemade, mainly cardboard strips
 [b] Experimental apparatus for comparing ~~profile~~ n.d.
 Homemade, mode of operation not known

COMPOSITE PHOTOGRAPHS

42. Prism of Iceland Spar in cork mount c 1878
 Ref: Nature May 23rd 1878
Journal of the Anthropological
 Institute Vol.8, Nov.1878
Life & Letters of FG by K.Pearson
 Vol.II, p.287
43. Pair of stereoscopic viewing lenses on c 1878
 wooden handles
 Ref: Memories of My Life by FG, pp.259,265
Life & Letters of FG by K.Pearson
 Vol.II, p.285
44. Long glass prism n.d.
 possibly for experiments in composite
 photography

45. Cover glasses for microscope slides used in composite photography n.d.
 Ref: Life & Letters of FG by K.Pearson
 Vol.II, p.287

ANALYTICAL PHOTOGRAPHY

46. Apparatus for analytical photography c 1900
 by J.H.Dallmayer
 Ref: The Photographic Journal No.25 Dec.
 1900, p.135-138
Life & Letters of FG by K.Pearson
 Vol.II, pp.312-316
47. Five glass blurrers c 1890
 Ref: Nature Vol.74, 1906, pp.562-3
Life & Letters of FG by K.Pearson
 Vol.II, p.329
48. Small bottle of balsam in benzole
 Ref: Life & Letters of FG by K.Pearson
 Vol.II, p.329
49. Wooden discs with grey shades c 1900
 Ref: Galton Papers No.161B
Nature No.62, 1900, p.320
Photographic Society Journal No.25
 1900, pp.135-138

FINGER PRINT INVESTIGATION

50. Box of material for portable finger print work c 1890
 by T.Hawkesly, with samples dated 1891 & 1892
 Ref: Finger Prints by FG, 1892, pp.35-41
51. Roller for finger print work c 1890
 Ref: Finger Prints by FG, 1892, p.36
Anthropometric Investigations in the British Isles, B.A.Report 1909, p.36
52. Homemade roller for finger print work c 1890
 Ref: Finger Prints by FG, 1892, p.40 &
 Plate 2 p.145
53. Assortment of plates for inking fingers c 1890
 Ref: Finger Prints by FG, 1892, p.48
54. Primitive apparatus for making finger prints c 1890
 with note by FG

55. [a] Block of black lead (plumbago)
Ref: Finger Prints by FG 1892, p.49
- [b] Black soap
by Prof. Helbig
- [c] Two sticks of solid oil colour
by Winsor & Newton
- [d] Four sample tubes of moist water colour Dec 1890
by Reeves & Sons
- [e] Two collapsible tubes of finger print ink c 1890
one by Reeves & Sons
Ref: Finger Prints by FG 1892, p.35
- [f] Three collapsible tubes for finger c 1890
print ink
Ref: as No 51[e]
- [g] Jar of finger print ink c 1890
now dry
56. Small hand palette c 1890
by Winsor & Newton Ltd
57. Paint mixing palette c 1890
58. [a] Finger print examiner c 1890
Homemade, with adjustable focus lens
- [b] Tripod magnifying lens - warp & weft c 1890
glass
Ref: Finger Prints by FG 1892, pp.72,73
- [c] Four small magnifying lenses - one a c 1890
linen prover
Ref: as No 58[b]
- [d] Magnifying lens in horn holder c 1890
- [e] Magnifier, with glass base with c 1890
cross-wires
- [f] Reading lens with mm scale c 1890
- [g] Two watchmakers examination lenses c 1890
- [h] Double lens reading glass c 1890
59. Prismatic camera lucida c 1890
Ref: Finger Prints by FG, 1892, p.52
Brit: Pat: Spec: No 2993 of 1806
60. [a] 8" wooden rule c 1890
From Prof. Penrose, said to have been
used by FG for finger print work
- [b] Homemade apparatus for measuring thumb c 1890
marks
- [c] Metal dividers, with scale c 1896
Said to have been designed by F.G.Collins

MISCELLANEOUS SCIENTIFIC ITEMS

61. Orrery, with tellurium and lunarium
by Bate, London, purchased by Samuel
Galton in 1818 1818
62. Japanese 'Steelyard' scales
by House of Owari n.d.
63. [a] Quincunx
by Tisley & Spiller 1873
Ref: Catalogue of special loan collection
of scientific instruments, South
Kensington Museum 1876, p.14
Life & Letters of FG by K.Pearson
Vol.IIIA, pp.9-11
- [b] Lead shot for quincunx
Ref: Life & Letters of FG by K.Pearson
Vol.IIIB, p.465
64. Box of dice n.d.
65. Pair of boxwood slide rules
one by Cary, for annuity calculations n.d.
66. Two morse tapping keys on common base n.d.
67. Magnetic needle in brass box n.d.
68. Pair of bar magnets, with keepers n.d.

OPTICAL ITEMS

69. Direct vision spectroscope
by Tisley & Spiller c 1875
70. Eight sets of cylindrical lenses
in pairs, plano-convex/plano-concave n.d.
71. 30 lenses in metal disc frames, for
optician's bench from +6.0 to -5.0 dioptries n.d.
72. 54 circular lenses for optician's bench
from +70 to -70 dioptries n.d.
73. Four brass stops for optician's bench n.d.
74. [a] Miscellaneous collection of lenses
some from old instruments n.d.
- [b] Miscellaneous collection of old
spectacle lenses n.d.
- [c] Lenses from FG's old gold rim spectacles June 1894

75. One right-angled prism
probably from binoculars n.d.
76. Five homemade hyperscopes (periscopes)
some dated April 1897 1897
Ref: Life & Letters of FG by K.Pearson
Vol.IIIB, p.618
77. Manufactured hyperscope (periscope) c 1897
Ref: see No 76
78. Frame for photographic enlarging n.d.
79. [a] Reading microscope c 1897
by the Cambridge Instrument Co.Ltd
from some unknown apparatus
[b] Reading microscope on slide stand n.d.

DRAWING MATERIALS

80. [a] Part of pantagraph n.d.
small part, not identified
[b] Few parts of Coradi pantagraph n.d.
81. Celluloid square with mm scales 1909
by Charles Baker 29th January 1909
82. 12" ivory scale n.d.
83. Rectangular card scale - The Library, n.d.
Sketching & Pocket Book Scale
by Hitlzapffel & Co. London
84. Two 6" Boxwood scales n.d.
both broken
by Watson & Sons
85. Keith's improved scales c 1885
on ivory 75° set square. Tip broken off,
by Cary
86. Three off-set scales n.d.
by G.Baker, London. One ivory, one boxwood
87. [a] Pair of ebony 6" parallel rulers n.d.
[b] Ebony parallel ruler n.d.
stamped E.S.Galton
[c] Pair of parallel rulers between
one by Aston & Mander, London 1877 &
1910
[d] One ebony roller straight edge n.d.

GALTON APPARATUS

88. One wooden French curve, end broken off by Hudels, Paris	n.d.
89. Opisometer - map measurer	n.d.
90. [a] 45° wooden set square corners broken off, by A.W.Faber, Bavaria	n.d.
[b] Three wooden set squares angles 45°, 60° & 70° by Cary, London	n.d.
[c] Two 45° set squares with mm scales by C.Baker, London one wood, one celluloid	n.d.
91. [a] Semicircular brass protractor	n.d.
[b] Card protractor by J.Scholz, Mainz	n.d.
[c] One celluloid protractor warped	n.d.
92. Ablett's drawing help Brit: Pat: Spec: No 5120 of 1886	c 1887
93. Pair of spring bow dividers	n.d.

MISCELLANEOUS ITEMS

94. [a] mm scale engraved on glass	n.d.
[b] Three sets of mm scales engraved on glass, each has two scales at right angles	n.d.
[c] Two scales engraved on glass one 1 to 4 inches, other 1 to 100 mm by Carl Zeiss, Jena	n.d.
95. Glazed circular wooden block with 7 hemispherical depressions labelled K to Q	n.d.
96. Six unidentified ebonite moulded blocks by W.Warne & Co. London	n.d.
97. Small collection of experimental objects incomplete, mainly cardboard and wood, unidentified one item has date Sept 2, 1898	n.d.

MISCELLANEOUS PERSONAL ITEMS

Found in Sir Francis Galton's writing desk after his death

- | | | |
|------|--|----------|
| 98. | Two seals
one with finger print of Galton's right
ring finger | c 1894 |
| 99. | One pair gold framed spectacles | n.d. |
| 100. | Three pairs steel framed spectacles
all in cases, two folding type | n.d. |
| 101. | Travelling mirror, with mahogany cover | n.d. |
| 102. | [a] Leather case containing pencils | c 1909 |
| | [b] Two boxes of pencils, etc. | c 1910 |
| | [c] Two chamoix pen wipers
both with initials FG on front | n.d. |
| | [d] Two pen wipers on table stands | n.d. |
| | [e] Two pens
one quill, other rhinoceros horn,
supposedly from S.W.Africa | n.d. |
| 103. | [a] Letter clip
mahogany base, metal clip in form of
letter F | n.d. |
| | [b] One 8½" wooden inkpot stand | n.d. |
| | [c] One glass inkpot | n.d. |
| | [d] One stone paper weight | n.d. |
| | [e] One wooden pin tray | n.d. |
| | [f] One wooden correspondence box | n.d. |
| 104. | [a] Wooden napkin ring
with Egyptian scenes and monogram FG | c 1900 |
| | [b] Small leather wallet, marked LG | pre 1897 |
| | [c] Glazed photograph of Mr Rutherford | 1881 |
| | [d] Lady's black dress belt
stated, worn by his mother on her last
evening alive | c 1873 |
| 105. | Linen backed travelling draught board | n.d. |
| 106. | Box of small white counters | n.d. |